

Navy Case No. 79,854
Inventors; Rolison et al.

Patent Application



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of Rolison et al. :
Application No. 09/689,000 :
Filed 10/13/2000 :
For: Amorphous, High Surface Area, Mesoporous :
Manganese Oxide Aerogels And Ambigels :

Examiner: Aileen Felton
Group Art Unit: 3614

Honorable Commissioner Of Patent And Trademarks
PO Box 1450
Alexandria, VA 22313-1450

Amendment

Sir:

Response to Rejections based on 35 USC Sec. 112

RECEIVED
NOV 07 2003
GROUP 3600

RECEIVED
JUL 28 2003
TECHNOLOGY CENTER 2800

In her office action mailed 6/16/2003, examiner Felton informed applicants that their SIR publication request filed 4/9/2002 would not be granted until a response was received for 35 USC 112 rejections issued on 10/13/2000 by examiner Bos in the parent to the SIR case.

Applicants respond below to said rejections.

1. In claim 1, "high surface area" is described in the patent application as being $\sim 200\text{m}^2/\text{gm}$ at page 8, paragraph 1, line 6. Thus the use of the term in question has only one range of value and is thus defined.
2. In claim 1, nanoscale is commonly used to describe substances which have a value in the millionth of a millimeter range. In the instant application sizes of pores are given as nanometer size in Figures 1-4. At page 8, paragraph 1, of the instant application pore size is given as 3-100 nanometers for the aerogels and ambigels of the instant invention. Long et al. p 454 shows nanometer sized particles of about 10 nm for various MnO_2 preparations. The manganese oxide particles must be consistent with the size parameters of the gels.
3. In claim 1, please delete "--substantially absent--" and substitute "--low or extremely low--", support for this substitution is found at page 4, paragraph 2 of the instant application.
4. In claim 1, line 4, said material is clearly referring to manganese oxide in lines 1 and 2 of claim 1. In line 3, "--gel of manganese oxide material--" is that material from which pore fluid is being removed to form the manganese oxide material which is the subject of the claim.

5. In claim 4, please substitute "--with KMnO_4 --" for "--using KMnO_4 --" as suggested by examiner Bos.
6. In claim 5, please substitute "--with NaMnO_4 --" for "--using NaMnO_4 --" as suggested by examiner Bos.
7. In claim 6, please delete "--such as hexane--".
8. In claim 7, please delete "--other--" at line 4 of claim 7. This usage is consistent with page 9, paragraph 2, lines 1 and 2 of the instant patent application.
9. In claims 14-17, please add "--said material being--" to line 1 of each claim after "material", and delete "--said--" from line 2.
10. In claims 18- 21, please delete "--form--" in line2 of each claim.

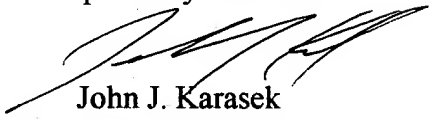
Comments:

Applicants believe that the comments and amendments to claims as outlined in paragraphs 1-10 above are fully responsive to the 35USC 112 rejections, and that the responses fully satisfy the examiners objections.

Applicants respectfully request that examiner Felton forwards this SIR application.

Prepared By:
William J. Connors
Reg. No. 31,208

Respectfully Submitted



John J. Karasek
Reg. No. 36,182